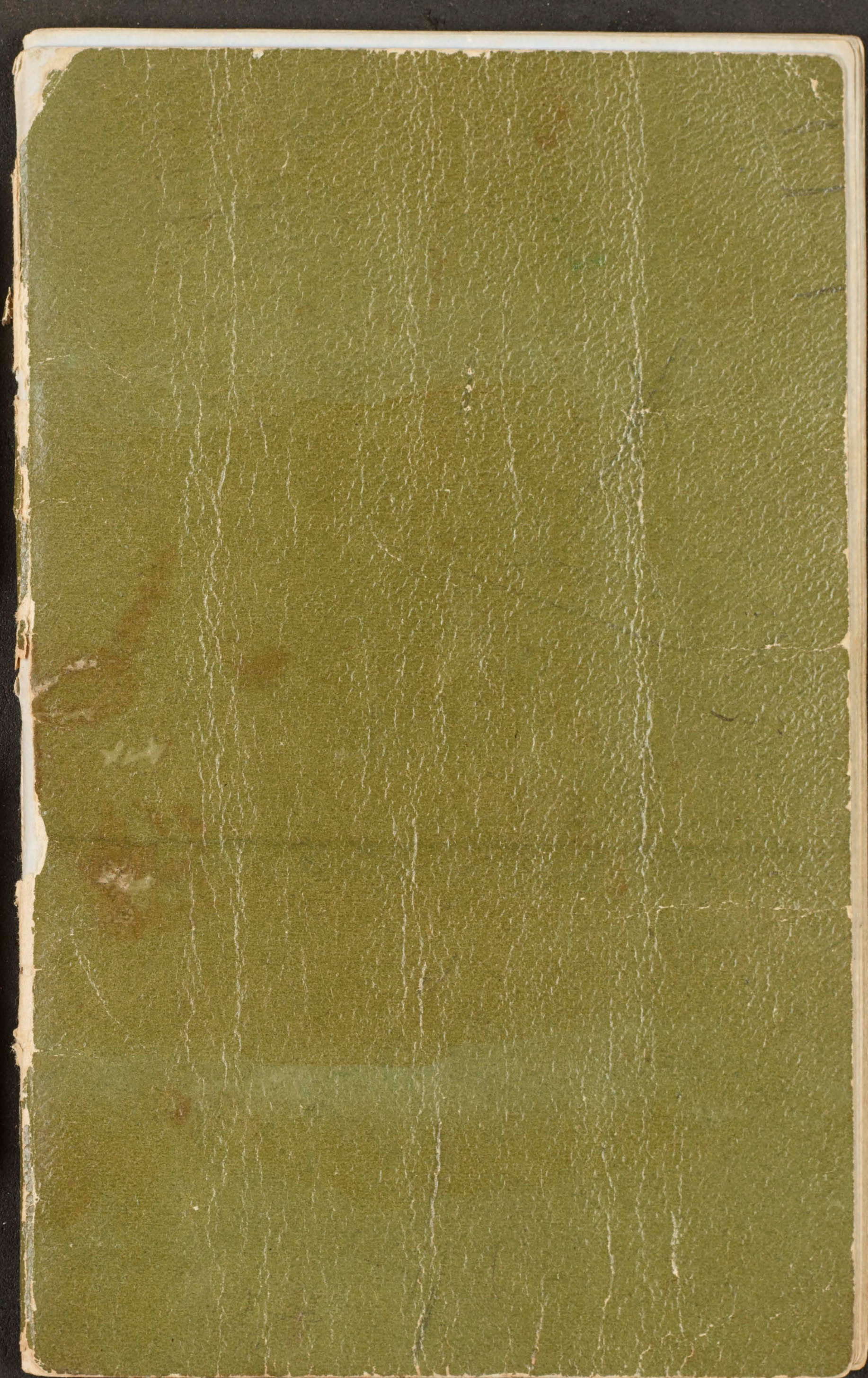




May

June 1880

May

682 - 135 -

W. J. Mc Keen's B.

Dream

And Imagination & Memory together
make up a rich dream land of
the past -

1 letter 1 pen and ink

4 cents - scraps of
paper (wimble, another
cent - 1 handkerchief -

man of paper - a picture
of envelopes - sketches
of dilapidated compositions

Price 10c

Price from a bookish & great

of winter in London

Bridges.

440a



Points of Asia,

	Lat.	Long.
East-Cape,	66 "	170 W.
G. of Anadir.	65 "	180 E.
S. pt. of Kamshatka,	51.	151.
W. Pt. Sea of Ochotsk	61.	160.
Ochotsk	60 "	141.
W. Pt. Sea of Ochotsk	55.	137.
Amur River "	52 "	141.
Intersection Sea, Japan	40 "	130.
S. Pt. of Corea,	35 "	127.
G. of Petchili "	40 "	120.
Yang-est. River "	31.	124.
Hoang ho. R.	34 "	120.
Gulf of Tonquin	20 "	107.
Cambodia R.	10 "	106½.
G. Siam "	13.	101.
Singapore "	1½.	104.
G. of Martaban	16.	98.

	Lat ⁿ	Long ^y
Cape W. Gulf. Martaban	16 ⁿ	94 ^y
Burrampoor "P."	23,	91.
Calcutta ..	22 ..	89.
Cape Comorin..	8 ⁿ	78.
G. of Cambay	23.	73.
G. of Cutch..	25 ⁿ	72.
Persian G..	30 ⁿ	50.
St. of Ormuz ..	24 ⁿ	54.
C. Bassal Head..	22 ⁿ	60.
St. Babelmandel..	13 ⁿ	43.
H. of Red Sea..	30 ⁿ	38.
S. E. Corner, Mediterranean ..	31.	35.
N. E. " "	37.	35.
St. of Dardenelle.,	40.	26.
" " Bosphorus ..	41.	30.
E. Pt. Black Sea "	42.	41.
W. extremity Caucasus. Mts.	45.	37.
E. " " " "	42.	50.
N. of Ural R.	47 ⁿ	51.

	Lat ⁿ	Long ^y
S. E. R. Caspian S.	37"	54"
G. of Obi.	73."	71"
N. Yenisei R.	73."	85"
" Lena R "	72."	130"
N. Kolumbia R.	70 "	160."
North Cape.	77"	105"
" " " " " " " "	" " " " " " " "	" " " " " " " "

Squares of Nos. above Twelve.

$$13^2 = 169$$

$$14^2 = 196$$

$$15^2 = 225$$

$$16^2 = 256$$

$$17^2 = 289$$

$$18^2 = 324$$

$$19^2 = 361$$

$$20^2 = 400$$

$$21^2 = 441$$

$$22^2 = 484$$

$$23^2 = 529$$

$$24^2 = 576$$

$$25^2 = 625$$

$$26^2 = 676$$

$$27^2 = 729$$

$$28^2 = 784$$

$$29^2 = 841$$

$$30^2 = 900$$

$$31^2 = 961$$

$$32^2 = 1024$$

$$33^2 = 1089$$

$$34^2 = 1156$$

$$35^2 = 1225$$

Extract - from McDoullock,

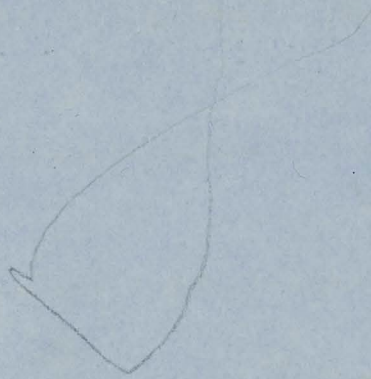
No part of the world has so many lakes as N. America, especially that portion between 42° & 67° lat. which might be justly called the lake region. It presents not only the greatest masses of fresh water on the surface of the globe, but so many smaller lakes & morasses that their enumeration is almost impossible. These lakes form a most important feature in the physical geography of the New World. In the rainy season, several of them overflow their banks; and temporary communications are then established between rivers whose embouchures are frequently at immense distances from each other. Some of these communications are permanent; as, for instance that of the Mississippi or Churchill with the Mackenzie river. The great-

Lakes of N. America, are, Lake Superior, Michigan, Huron, St. Clair, Erie, & Ontario. These, which are all connected together, discharge their surplus waters by the St. Lawrence, & form that vast reservoir of fresh water sometimes called the sea of Canada.

The next in size & importance are Lakes Winnipeg, Athabasco, Great Slave Lake, & Great Bear Lake, stretching N. N. W. from Lake Superior, to near the mouth of the Mackenzie river. & forming as it were, a continuation of the Canadian lakes. There are some considerable lakes in the Mexican states; & the comparatively small lakes of Texaco, Xochimilco &c, in the valley of Mexico are remarkable for their elevated situation, their vicinity to the capital, & the superb works undertaken to

prevent the damage caused by their
frequent overflowing. The lake
Nicaragua in Central America, is
remarkable for its size, the beauty
of its scenery, its volcanoes, & from
its forming the basis of the works
projected for uniting the Atlantic
& Pacific oceans. "

Mc



Dec 4th 1856

Points of Europe.

	Lat.	Long
Cape North	71.	25"
Protheim	63.	10"
Bergen	61.	5"
The Maze	58.	7½"
Christiana "	60.	10+
S. pt. Sweden	56.	17"
Stockholm "	59.	19"
N. Borneo R.	64.	26.
N. Am. " "	61.	22½"
St. Petersburg	60.	30"
G. of P. Riga	57.	24"
Rumania R.	55.	21.
N. pt. Denmark	57½.	10+
N. Elbe R.	53½.	9"
N. Rhine R.	52.	4"
Calais "	51.	2
N. Seine "	49.	1"
Brest	48.	5" W.
Loire	47.	2"

Bayonne "	43 ½ "	1 ½ "
C. Finisterre "	43 "	9 "
C. St. Vincent "	43 " 9 "	37-9 "
C. Verafa	36 "	5 "
C. Gata "	37 "	2 "
C. St. Martin "	39 "	0 "
C. Lyons "	43 "	3 ½ " E "
G. Genoa "	44 "	9 "
C. Spartavento "	38 "	16 "
C. Di Leuca "	40- "	18 "
Venice "	45 ½ "	12 ½ "
Trieste "	46 "	14 "
St. J. Oranto "	42 ½ "	19 +
C. ^{nearby} Matapan	36 ½ "	22 ½ "
Salonica "	41 "	22 ½ "
St. Dardenelles "	40 "	24 "
Constantinople	41 "	29 "
M. Danube "	45 "	30 "
M. Princes "	47 "	32 "
S. St. Crimea "	44 "	37 "

M. Dord. 47 1/2 " 39"

S. E. cov. Black sea. 41.7 " 41 + "

Grass 833 & page

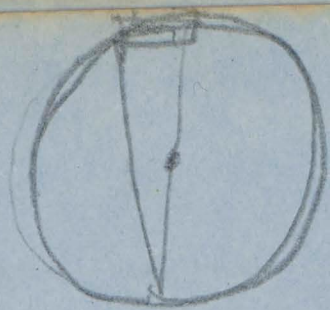
So the central granite 834 page

Grass to the soil 835 page

Learn Soil agriculture

833 & 834 (most important)

The rays of Happiness are like
those of light - colourless only
when unbroken.



KWM

$$v = \frac{g^2}{a} = g$$

$$v^2 = g a$$

v^2 in the fall of bodies = $4gs$.

$$ga = 4gs$$

$$a = 4s$$

$$\frac{1}{2}a = \frac{1}{4}a = 8$$

John Wilson - born 1768, at -
Dunblane - Glasgow university at
Aberdeen 1811 & obtained a
professorship of Moral Philosophy in
the university of Edinburgh.
Recreation of Chris North is the
principal collection: Isle of Palms
City of the Plague - Poems.
Novels - Lights & shadows of Scottish
Life Trials of Margaret Lindsay,
The Fortifiers.

$$3.1416^2 = 9.86965056$$

$$9.86965056 \times 2 = 19.73930112$$

Earth's radius = 20919360. Thus

$$r^2 = 437619622809600$$

$$T^2 = 5572064670400$$

$$R^2 \times T^2 = 2438440463134915049955840000.$$

$$\times 16\frac{1}{2} = 39215250782086598636789760000.$$

$$\div 19.73930112 = 198681050974623900034602.$$

$$T^2 = 55720782756257$$

Arithmetic

Geometry

Algebra



248845079324457688569600000

X 1619 = 39215416924683648744944400000

÷ 19.73930119 = 19868189195891674884639

74625- $\sqrt[3]{1257147099}$ ÷ 5280

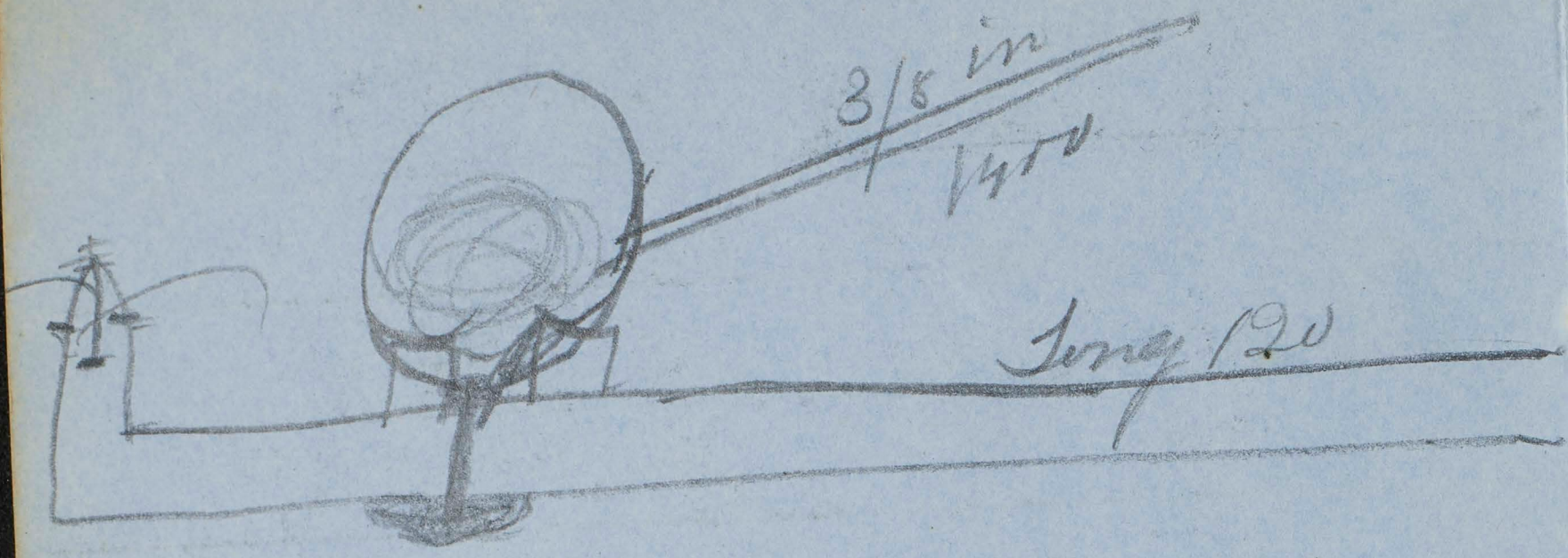
238.096 +

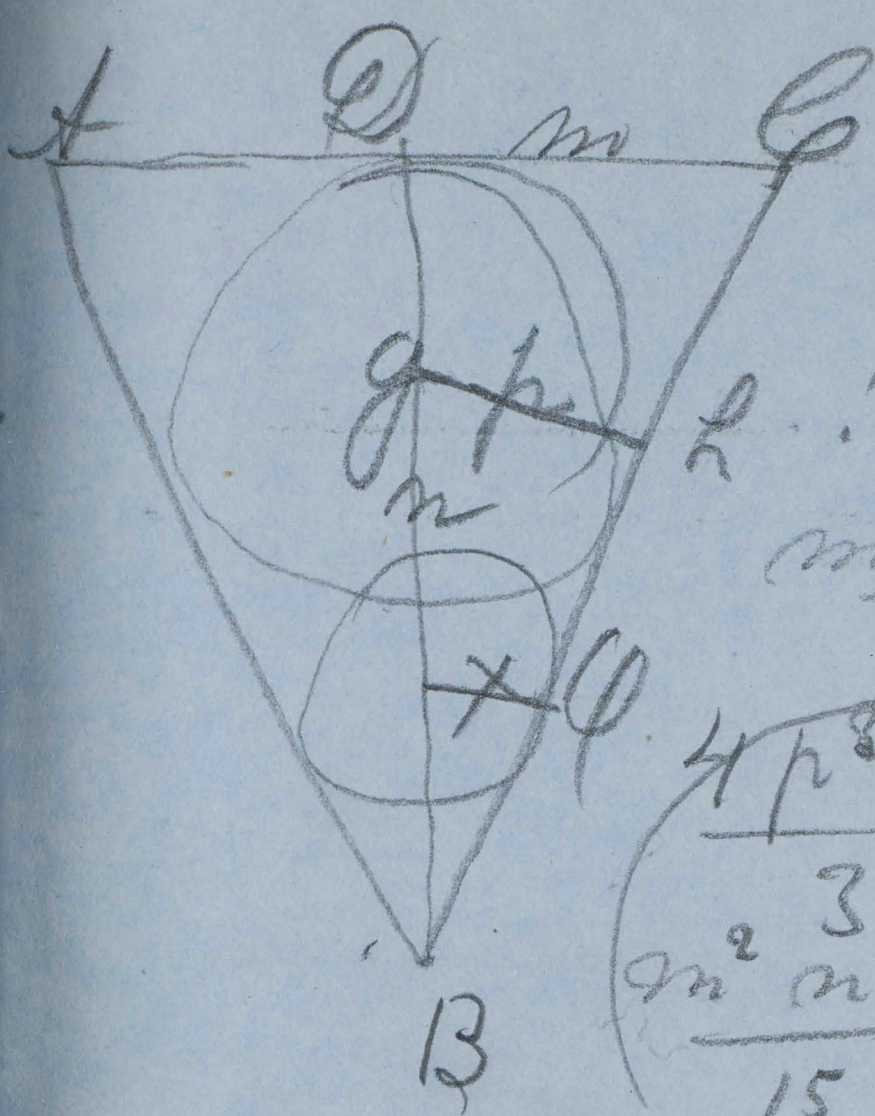
$a^3 + 3a^2h + 3ah^2 + h^3$

$b(3a^2 + 3ah + h^2)$

203.136

42. +





$$m = 2\frac{1}{2}$$

$$n = 6$$

$$0 + m : m : n : p$$

$$\therefore p = \frac{m n}{0 + m}$$

$$\frac{m^2 n}{3} \pi = \text{Sol of large cone}$$

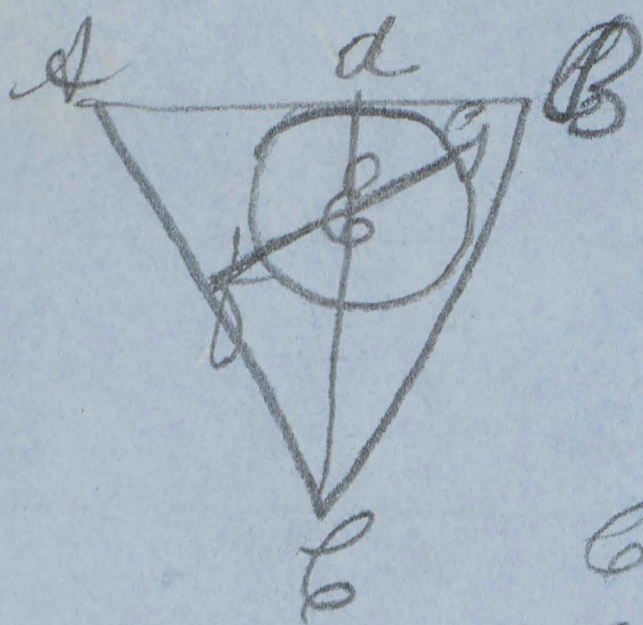
$$\frac{4 p^3}{3} \pi = \text{Sol of large sphere}$$

$$\frac{m^2 n}{15} \pi = \text{Sol of small cone}$$

$$\frac{m^2 n}{3} \pi - \frac{4 p^3}{3} \pi = \frac{\pi}{3} (m^2 n - 4 p^3)$$

$$\frac{\pi}{3} (m^2 n - 4 p^3) : \frac{m^2 n}{15} \pi :: p^3 : x^3$$

$$5(m^2 n - 4 p^3) : m^2 n :: p^3 : x^3$$



$$a \text{ to } b = 5 \text{ in}$$

$$d \text{ to } c = 6 \text{ in}$$

$$a \text{ to } c = 6.5 \text{ in}$$

$$6.5 - 2.5 = 4 \text{ in}$$

$$6 : d :: a : b :: c : f$$

$$6 : 2.5 :: 4 : \frac{10}{3} \times 8 \frac{1}{3} = \frac{10}{3}$$

$$5 \times 5 \times .785398 \times 2 = 39.2699$$

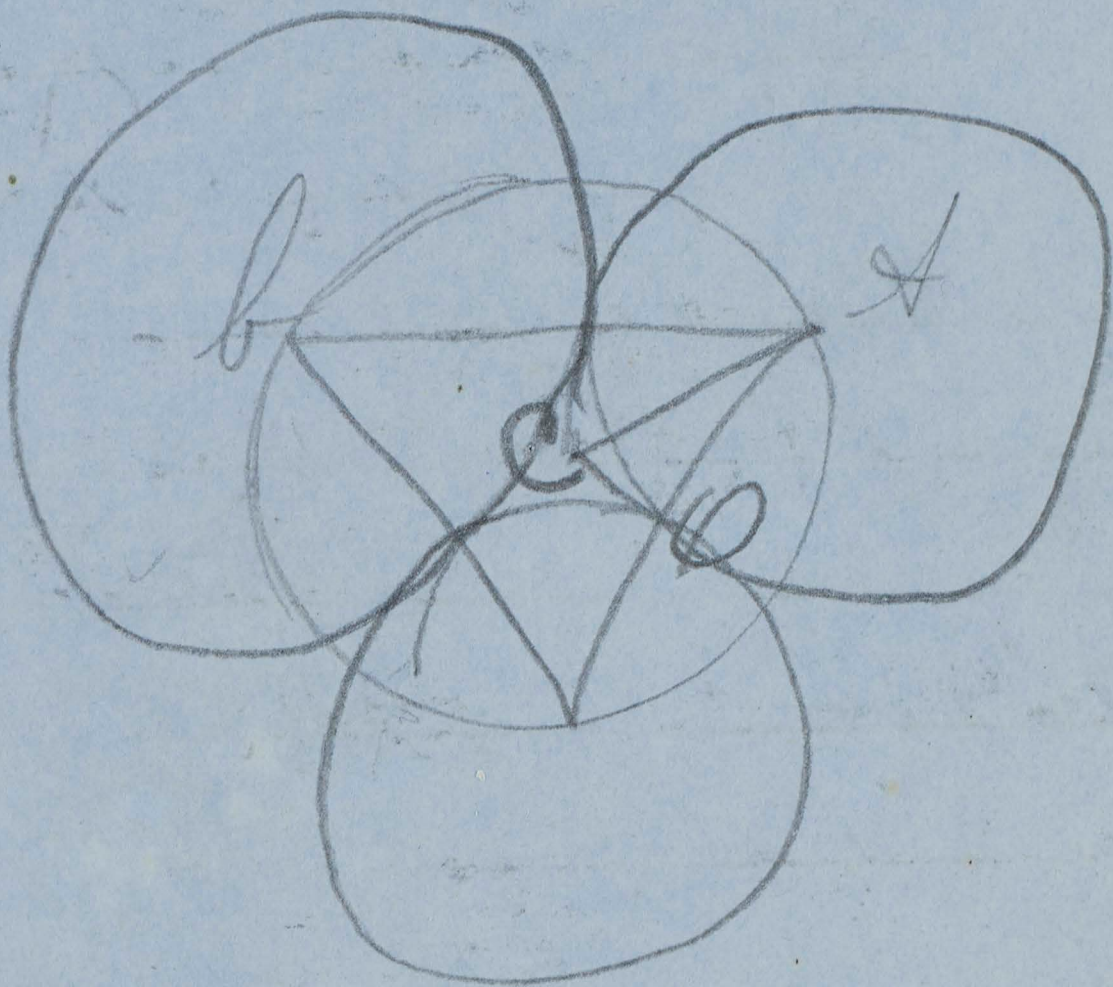
$$\frac{10}{3} \times \frac{10}{3} \times .5236 = \frac{19.8774}{19.8774}$$

$$39.2699 \div 5 = 7.85398$$

$$\frac{10}{3} \times \frac{10}{3} \times \frac{10}{3} = \frac{1000}{27}$$

$$19.8776 \div \frac{1000}{27} = 7.85398$$

$$\sqrt{14.8} 4114599 =$$



$$CA^2 : CA^2 :: 3 : 4$$

$$CA : CA :: \sqrt{3} : 2$$

$$CA + CA : CA :: \sqrt{3} + 2 : \sqrt{3}$$

$$R : N : \sqrt{3} + 2 : \sqrt{3}$$

$$A : a : 7 + 4\sqrt{3} : 3$$

$$500 : a :: 7 + 4\sqrt{3} : 3$$

$$a = \frac{1500}{7 + 4\sqrt{3}}$$

$$a = \frac{1500 + 6000\sqrt{3}}{49 - 48}$$

Pentameter
Milton's Paradise Lost - Iambic
Spenser - Iambic Pentameter
Sh

Evangelina. Hexameter
Dactyls all but last
In Hexameter the last foot is
a spondee & the next to the last a dactyl

There are many things that - cannot be defined

Laws of light.

Light is composed of actual
luminous particles thrown off
from every luminous body &
these particles we see.

That there exists all space
& all bodies waving floods of
ether, which refracts everything
thus compares light to sound

Material & Undulatory.

Spondee	—	—	1st class
Pyrrhic	—	—	
Iambic	—	—	
Tambic	—	—	

Dactyl	—	—	2d class
Amphibrach	—	—	
Anapest	—	—	
Tambic	—	—	
Tribrach	—	—	

The rising sun has hid the stars, the
 Her level rays like golden bars,
 Lie on the landscape green,
 With shadows brown between.
 A body of rays going to or from a
 single point is a pencil.

Crossed Meter. Left meter

origin of light —
 Those that originate light — that do not —
 Luminous Non luminous

Transmiss. of light —

Transpar.
 Transl.

Opaque

no body is perfectly trans. & none per. opaque

When light falls on a body
 1. absorption
 3. Reflection { Irregular
 Regular — mirror
 Some glasses call these may be observed
 Light is divided of from every
 point of every transparent
 body in all directions in
 straight lines.



What-kind of a mathematical
 quantity is a shadow,

A shadow is a parallel ray
 is a shadow

Exaggerated

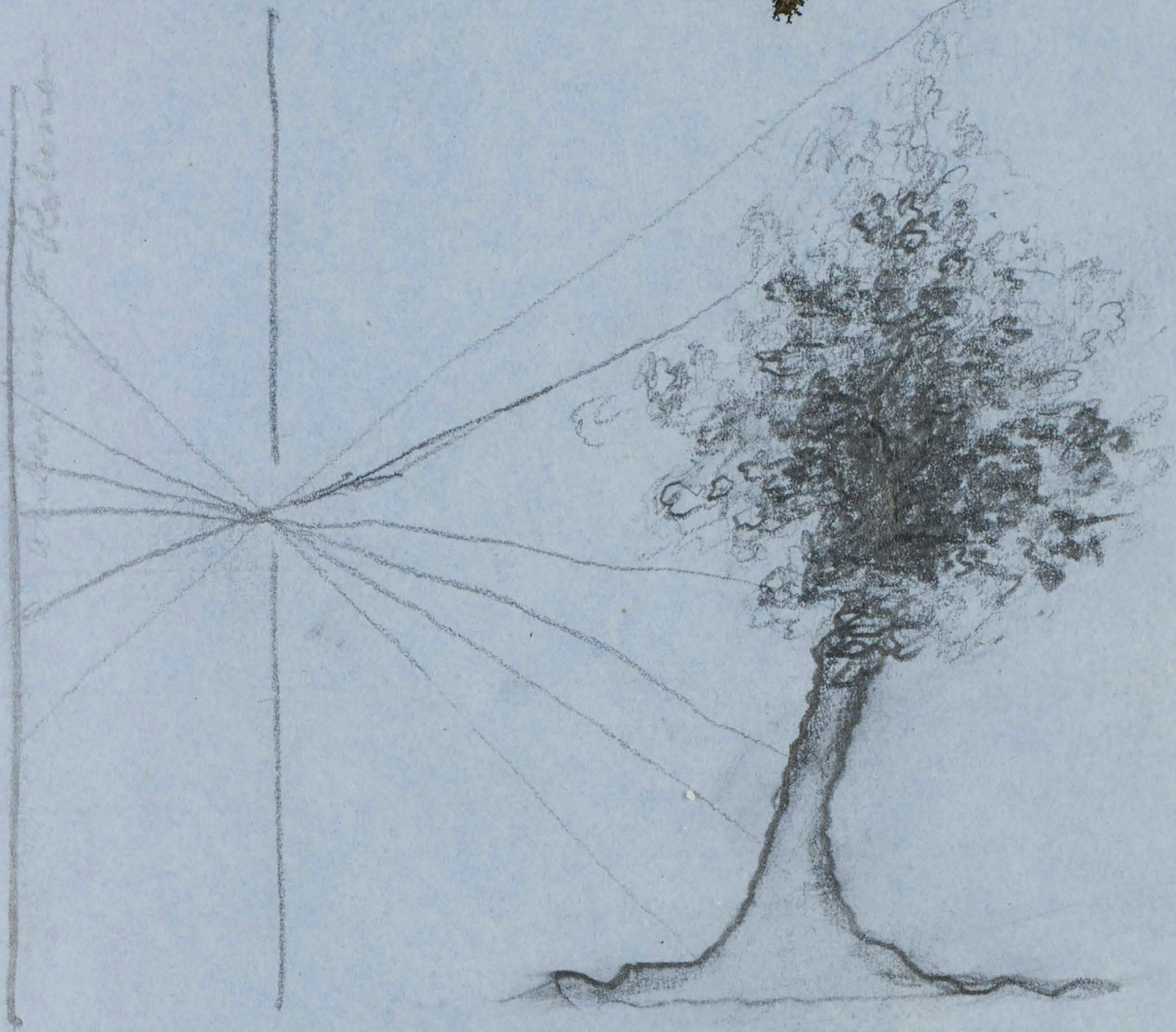
Remember me

Remember the old lecture
room in Bridgeman
where one bright sunny
morning ^{Feb 4th 1856}
you took your first lesson
in making astronomical
observations & how little you
thought then what a
renowned Astronomer you
would become in future
ages

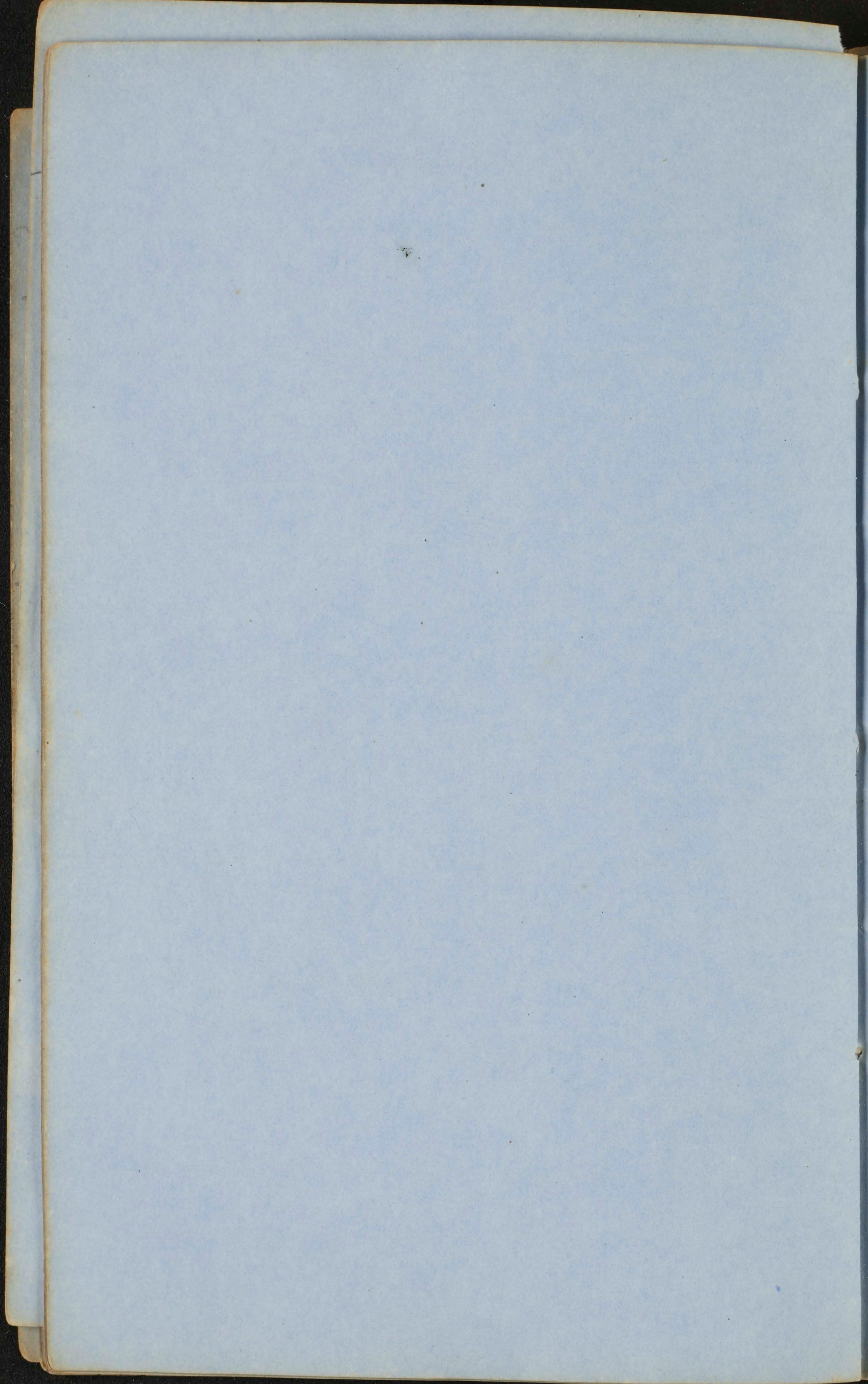
Har M. Nichols

195000 nearly 20000 miles from
de,

Palmer - assuming a net work



15244



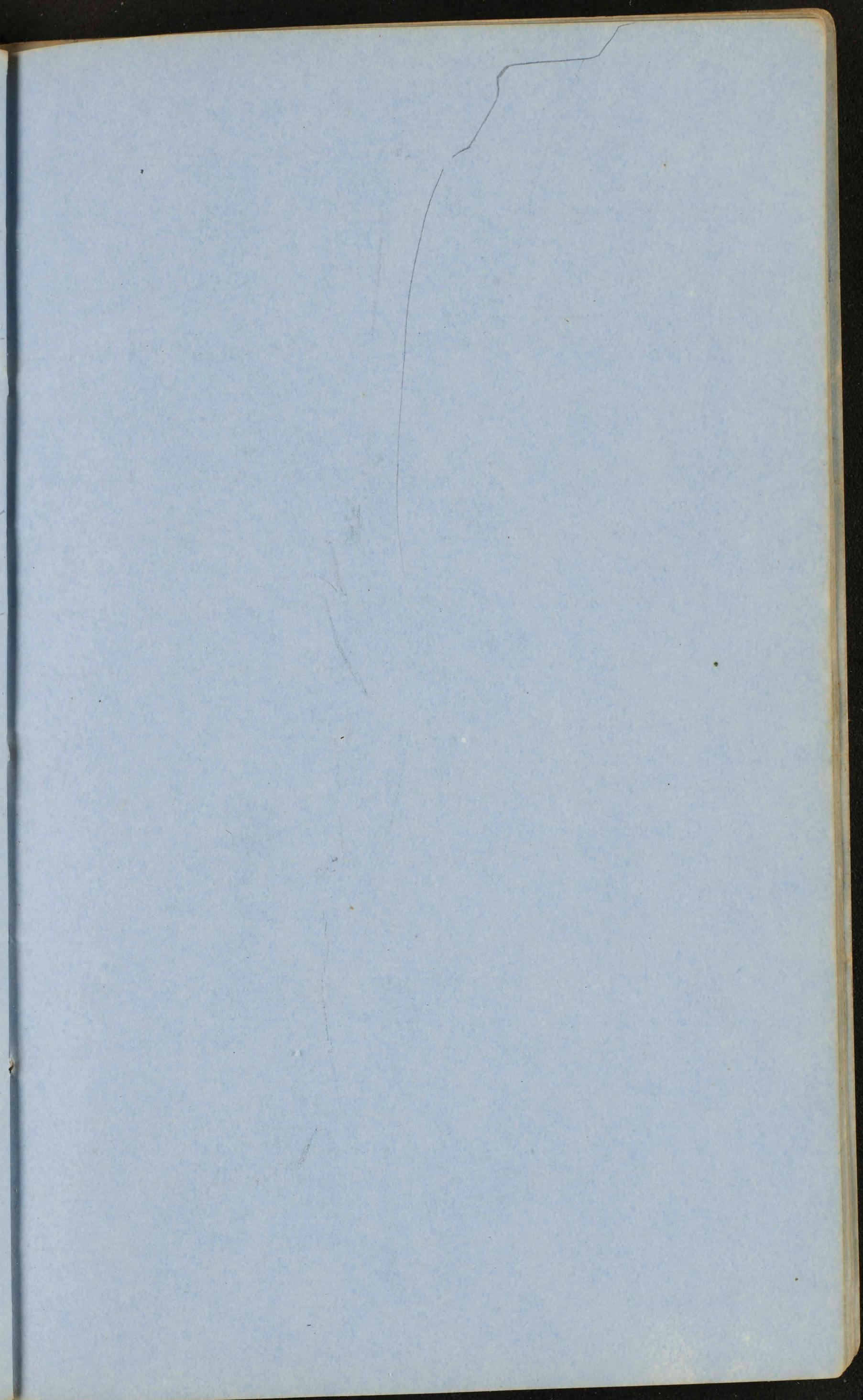
3	5	7	8	9	10
4	11	12	13		6

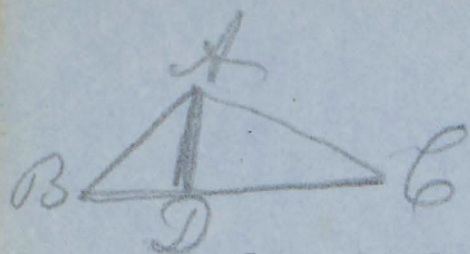
14	18	18	15	19	8
7	6	5	8	9	13

3	8	9	18	90	13
7	12	9	<u>8</u>	<u>90</u>	<u>6</u>

Poor Mans Cake
1 cup Milk $\frac{1}{2}$ cup butter
1 egg 2 cups sugar
1 table spoonful baking soda

My Barleys cookies
1 cup corn milk
207 sugar 107 butter
11 spoonful baking soda
mix a little with
the sugar





$$\cos B = R \frac{AC^2 + BC^2 - AB^2}{2 AB \times BC}$$

$$AC^2 = AB^2 + BC^2 - 2 BC \times BD$$

Adding $2 BC \times BD$ to both sides the equation

$$= 2 BC \times BD + AC^2 = AB^2 + BC^2$$

Subtracting AC^2 from both sides $= 2 BC \times BD$

$$BD = \frac{AB^2 + BC^2 - AC^2}{2 BC}$$

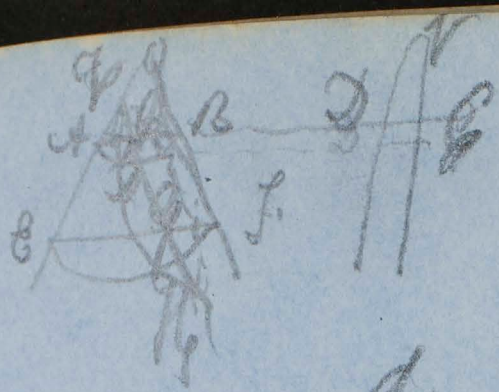
In the right-angled triangle ABD we have

$$R : \cos B :: AB : BD$$

$$\text{but } BD = \frac{AB^2 + BC^2 - AC^2}{2 BC}$$

$$R : \cos B :: AB : \frac{AB^2 + BC^2 - AC^2}{2 BC}$$

$$\cos B = R \frac{AB^2 + BC^2 - AC^2}{2 AB \times BC} //$$



AC: 49: AC: EF

a VE: 49: AB: 60: 23: 92

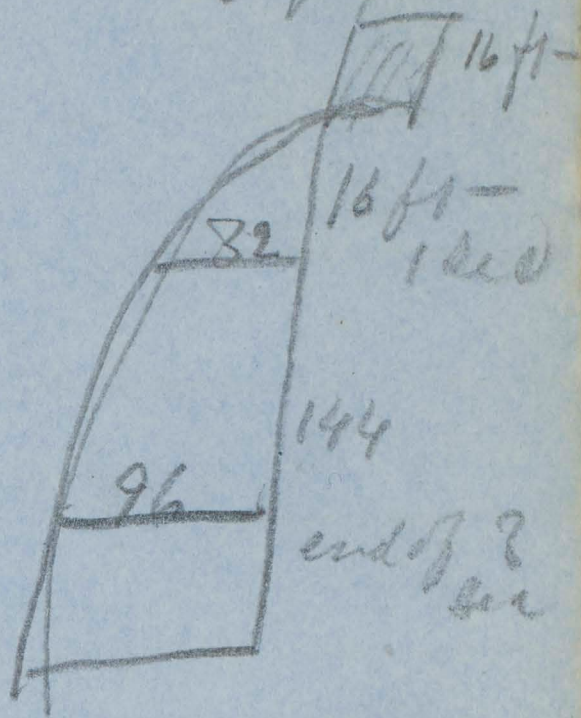
a AC: 79: 16: 2: 9: 76

Then taking a plane

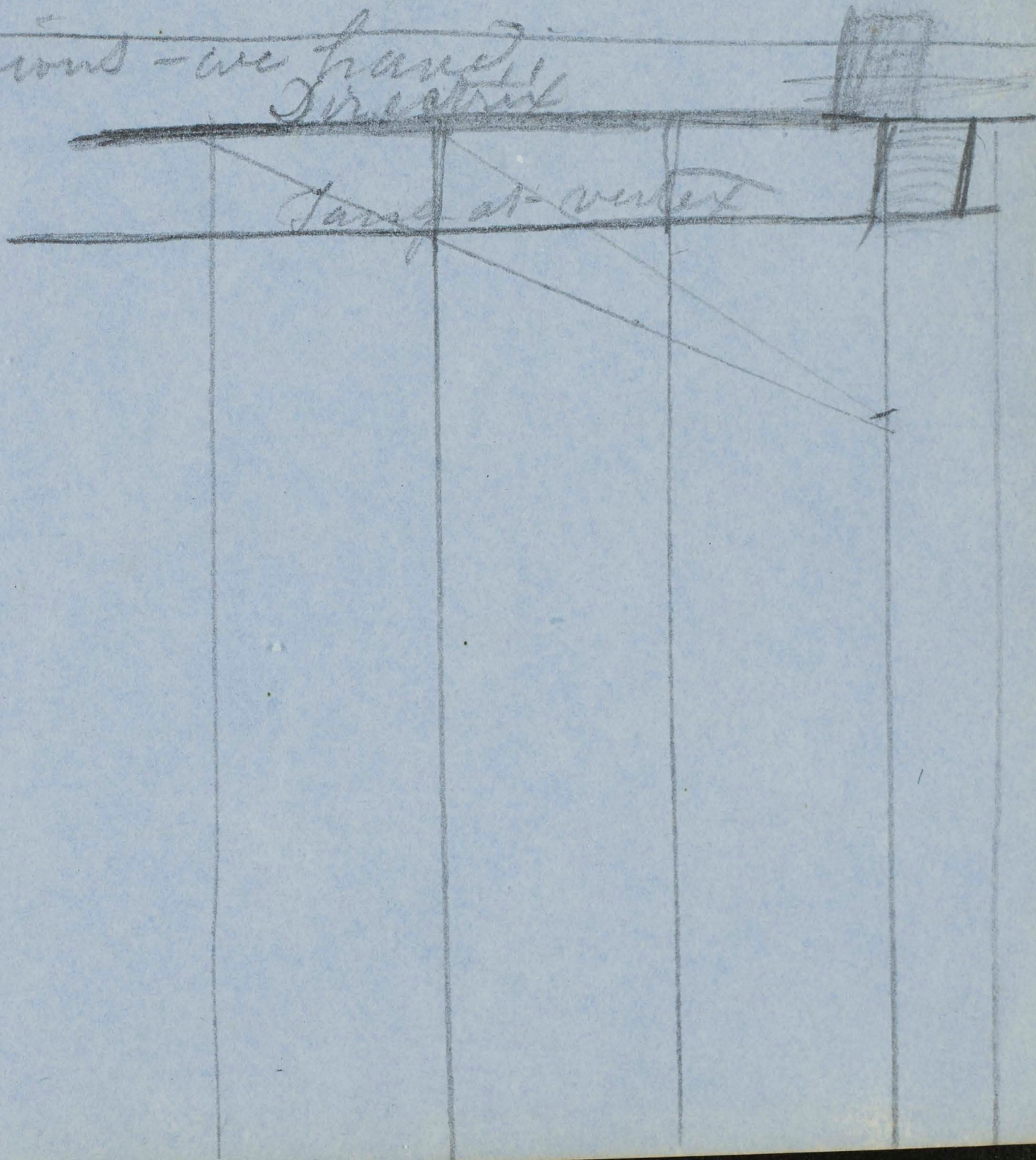
16: 144: 32: 96²

16: 144: 19: 32

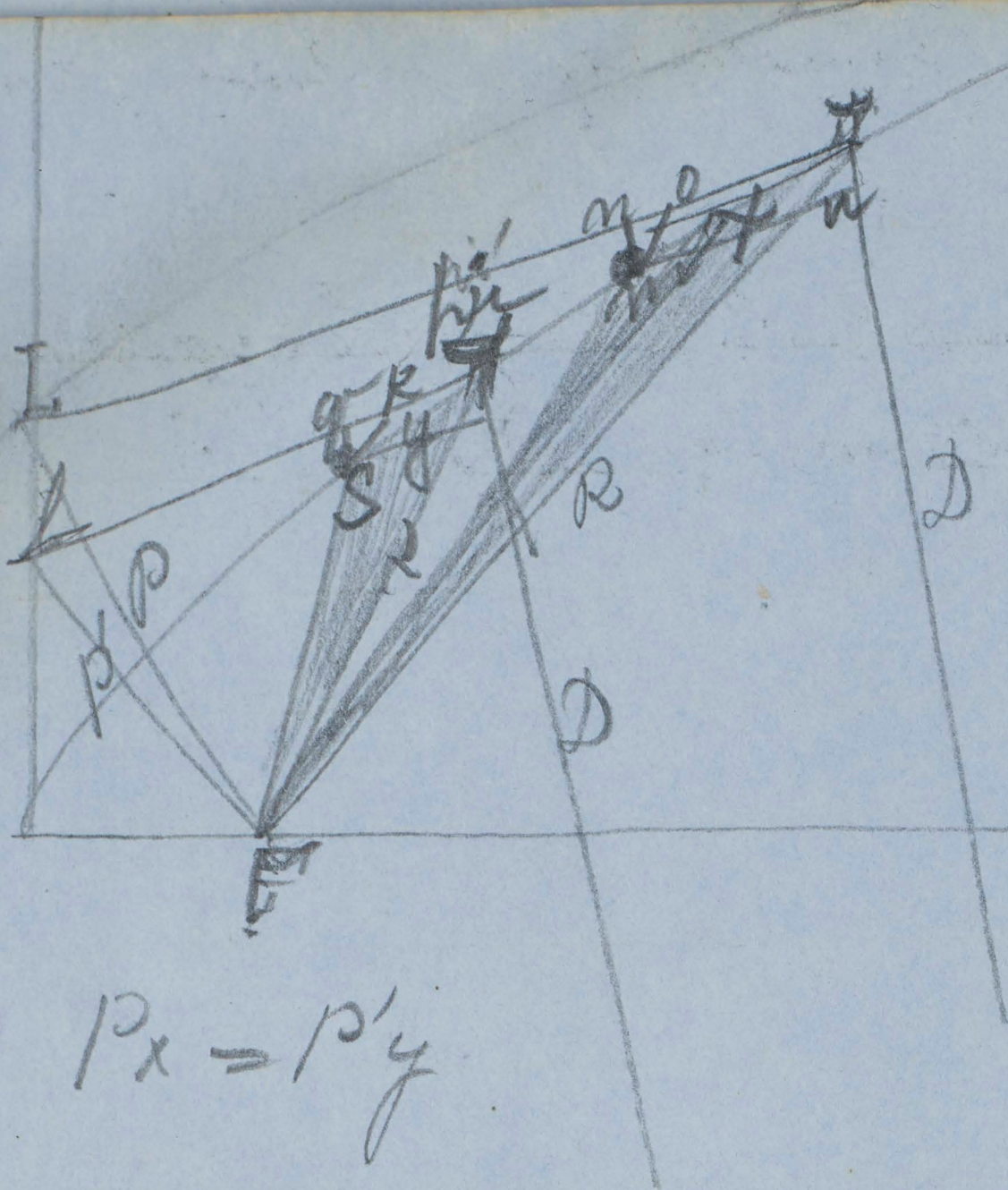
16: 144: 1: 9



Previous - we have
Direct



Direction



~~5~~ $p_x = p'_y$

D- Diameter of ascending circle

5th April

Inferior conjunction Eclipse

p_2 is always $= FF \times 12$

$11\frac{6}{7}$ $19\frac{5}{12}$ $23\frac{5}{9}$

$54 \frac{209}{252}$

$18\frac{4}{5}$ $27\frac{7}{10}$ $49\frac{1}{2}$

96

$21\frac{4}{9}$ $18\frac{2}{3}$ $26\frac{5}{6}$

$66\frac{17}{18}$

$37\frac{11}{12}$ $614\frac{19}{20}$ $81\frac{9}{4}$

$1068 \frac{37}{60}$

$6\frac{3}{5}$ $7\frac{8}{9}$ $4\frac{3}{8}$

$18 \frac{311}{360}$

Lonely
Only ;
Immediately
Lovely
Hope
Fairly
Freshly

Chelise

When the glorious Indian Summer flooded towards us from
the Spirit-house - Staked in trailing azure nestlings - such
as Grecian mountain crows, On their dips one shadowy
finger & a censer in her hand - Whence a wreathing
cloud of indence rose & enlarded all the land,

A draft of ink ~~falling in~~
falling like dew upon a butterfly's produced
that which makes thousands, perhaps millions, think.

We are such stuff
As dreams are made of, and our little life
Is rounded by a sleep. Shakespeare

There is always a dark spot - upon our dream: it is
the shadow of our unbelief.
Carlyle.

access
barra

Kepler's First Law

All the planets move in $\star$ Ellipses
& the sun is in its lower focus.
2^d Law.

The Radius Vector describes equal
areas in equal times.

3^d Law

When the attribute is an adjective
 the verb is called a copulative

When the attribute is a participle
 the verb is attributive.

7 to m

$$16 \overline{) 12} = \frac{3}{4}$$

~~+ a +~~
~~by~~

~~a~~
~~by~~

$5\frac{1}{4}$

|||||

|||||

||||

|||||

÷ a by

If we have a quantity to be divided
 into two parts which shall have a certain
 ratio to each other

+ that -

w

of

m

Richard H. Dana. - poet & novelist - was born in Cambridge on the 15th Nov. 1797. where he remained until he entered Harvard college - at which institution he remained 3 years. He became a member of the bar - was was obliged to abandon his profession on account of his health. His first literary production was a fourth July oration, delivered in 1814. He became a contributor to the N American Review, His poems the Dying Reaver - & the Buccaneer were published about 1827 & met with a very favorable reception.

5th 47 mags -	\$ 543.28	Int 168 dec	= 16.534
	723.13 "	150 "	18.078
	484.00 "	37 "	2.968
	326.18 "		
		Gain	37.580
		Loss	393
Loss 236.00		Gain	37.187
Int 2412.59			
Int - 1 mo =	\$ 12.06295		

Int - 92 days before Oct. 10th 1853
 which is July 8th 1852.

40 bu

certain

only 25 - 50 mags
 prob 1041. long
 lead 415 lbs
 this man - pole
 5/11 of the load

